```
//This function is a simple boolean logic flow. You are passed two boolean variables, then must return a value based off of those inputs.
//You must put the condition with two conditions first. You need to check if x & y meet their combined condition before checking them individually.
//Otherwise, you could end up with the wrong return value.
//The rest of this code is just simple condiitonal logic, with a return statement specific to the condition.
//You could use "if" statements in place of the "else if" statements and receive the same result.
function logicalColors(x, y) {
  if (x === true && y === false) {
    return "Blue"
  } else if (x === true) {
    return "Red"
  } else if (y === false) {
    return "Yellow"
  } else {
    return "Purple"
  }
}

//The return value is set to 0. Assuming non-negative numbers, this will be lower than anything in the array.
//In the for loop, you loop through the array of numbers. If any of the numbers are higher than "highest" currently stored value, highest will be reset to
that value.
//Once the array has been fully looped over, the highest value will be returned.
function max(nums) {
  let highest = 0;
  for (let num of nums) {
    if (num > highest) {
      highest = num
    }
  }
  return highest
}

function removeNumbers(str) {
  let finalValues = []; //this is the return value
  for (let char of str) { //iterates through the input string
    let charToNum = +char //the '+' will cast the current character to an Integer if it is a number, or do nothing if it is Not a Number
    if (char === " " || isNaN(charToNum)) {// if the current character is Not a Number, or is a space...
      finalValues.push(char) //then it will be added to the return value array
    }
  }
  return finalValues.join('') //join will join every value in the array into string and return it.
}
```

```
function onlyEvens(arr) {
  let result = []; //initialize return array
  for (let num of arr) { //iterate through the numbers in the array
    if (num % 2 === 0) { //modulo will return the remainder of the division. even numbers will divide with no remainder, so if the remainder is 0, they are
even.
      result.push(num) //this will add even numbers to the return array
    }
  }
  return result; //the final returned array will have only even numbers
}

function containsEveryVowel(str) {
  let vowels = 'aeiou'; //this defines all vowels
  for (let vowel of vowels) { //this will iterate through the string of vowels
    if (str.includes(vowel) === false) {//this will check if the input string contains the current vowel
      return false //if it does not, then it returns false
    }
  }
  return true; //if it does, then it returns true
}

function vowelFrequency(str) {
  let result = {}; //initalizes a dictionary to store the result in.
  let vowels = "aeiou"; //this defines all vowels
  for (let char of str) { //this will iterate through all of the characters in the input string
    if (vowels.includes(char)) { // if it is a vowel...
      if (result[char] === undefined) { //and the vowel is not in the dictionary
        result[char] = 1 // it will be added to the dictionary, with an initialized value of one
      } else {
        result[char]++ //if it is in the dictionary, it will be incremented
      }
    }
  }
  //now, you need to convert the count in the dictionary into a return string
  let returnString = ""; //initialize an emptry string
  for (let key in result) { //iterate through the keys in the dictionary
    returnString += key + result[key] //add each  key and it's value into the return string
  }

  return returnString; // return the count of the vowel frequency.
```